

ON THE LIZARDS OF THE CHILLAGOE DISTRICT,
N. QUEENSLAND.

BY R. BROOM, M.D., B.Sc.

During a residence of over six months in North Queensland I devoted most of my spare time to the collection of zoological and botanical specimens. The township of Muldiva in which I resided came into existence in connection with some local silver mining and smelting operations, and when the working of the silver had to be abandoned through the fall in prices the township did not long survive the death of the industry. Muldiva was situated almost on the dividing range between the Walsh River and the Tate, about 70 miles west of Herberton, and at an elevation of about 1800 feet. The country consists for the most part of undulating plains, from which there rise numerous low ranges of hills. To the north the hills and rocks are chiefly composed of quartzite and limestone, which, when disintegrated, give rise to a fairly good soil. To the south the character of the country is very different, almost all the rocks and hills being composed of granite. Here the soil is very poor, being chiefly composed of sand and small pieces of quartz from the disintegrated granite, while at a depth of a foot or two is generally found a substratum of clay from the decomposed felspar. The whole country side is covered with the usual open forest of Eucalyptus trees, with a considerable admixture of other sorts, Grevilleas, Brachychitons, Acacias, &c. During the eight months from April to November, as a rule, there is practically no rain, and almost all the vegetation, with the exception of the trees, becomes withered up, giving the whole district a very barren appearance. From December till March there are thunderstorms nearly every day with an abundant rainfall, which soon gives rise to a luxuriant

outcrop of grass and flowers. The long spell of dry weather seems to be unfavourable to the reptilian fauna, and as a result snakes are rare, and lizards not very plentiful. Though a careful search reveals the presence of a considerable variety of forms, only four or five lizards are at all common. In the following list are noted all the lizards that have been found, and though it is not improbable that a few other forms exist in the district which have not been observed the list may be held to give a fairly good idea of the lacertilian fauna :—

NEPHRURUS ASPER, *Gthr.*—This remarkable little lizard is no doubt rare, as I was not fortunate in personally coming across a specimen, though two were brought me, one of which was alive. In its movements it resembles much more the chameleons than any of the normal geckoes. The live specimen made no attempt to bite, and would allow itself to be lifted without making any great resistance. In the stomach of the other specimen I found the remains of a cricket, and some other much digested remains, probably those of caterpillars.

GYMNODACTYLUS PELAGICUS, *Gir.*—In my collection I find only one specimen of this gecko, so that it must be regarded as rare.

HETERONOTA BINOEI, *Gray.* Native name *Mbootoo*.—This little gecko is one of the commonest lizards of the district. It is chiefly found on the ground under stones, pieces of bark and fallen timber.

DIPLODACTYLUS PULCHER, *Stdchr.*—One of the rarer geckoes of the district.

ÆDURA TRYONI, *DeVis.* (= *Æ. ocellata*, *Blgr.*).—This beautiful gecko is by no means rare, and the variations in colour are remarkable. The variety figured in the British Museum Catalogue as *Æ. ocellata* is the form least commonly met with, most specimens being more or less distinctly banded, and, though there is no constancy in the markings of the body, there is generally a more or less marked dark band round the occipital region. In spirit specimens the bright colouring of this gecko is to a large extent lost. It is chiefly found among the limestone rocks.

ŒDURA RHOMBIFERA, Gray.—Though by no means so plentiful as *Heteronota binocæ*, this little gecko is fairly common, but is found in quite different situations from that form—generally frequenting the roofs of bark outhouses. It is a very agile little lizard, and it is particularly interesting to watch its stealthiness in stalking its prey, and its quick little spring when within striking distance. At times, however, it appears possessed of more valour than discretion, as I have seen a little one 3 inches long vainly endeavouring to catch a dragonfly considerably larger than itself, which had got into an outhouse and was buzzing round the roof, the little gecko making a spring at it every time it passed.

GEHYRA VARIEGATA, D. & B. Native name *Dtella*.—In most of the wooden dwelling-houses is to be found this very pretty gecko. During the day it lies hidden in some corner, and in the evening is found wandering about the walls.

PYGOPUS LEPIDOPUS, Lacép.—This snake-like lizard, though occurring in the district, is exceedingly rare.

TYMPANOCRYPTIS CEPHALUS, Gthr.—Though not common, I was fortunate in obtaining three or four specimens of this pretty little Agamid. All the specimens I obtained were got among the limestone rocks.

DIPOROPHORA AUSTRALIS, Stdehr. Native name *Urnysem*.—This is by far the commonest of the lizards of the district. It is well distributed, but most abundant in the limestone country. In general habit it resembles young specimens of *Amphibolurus muricatus*, but unlike that species is rarely seen except on the ground. When standing on the look-out it holds its little round head well elevated on its slender neck. When disturbed it runs off at a pretty rapid pace.

An interesting point about this lizard is the very remarkable variation in colouring that is met with. From specimens beautifully ornamented with sooty-black markings, to light slate-coloured specimens with scarcely a trace of markings almost every degree

of ornamentation can be found. The colouring and marking of specimens had apparently very little, if any, connection with the surroundings, light and dark specimens living together in the one situation, and apparently getting on equally well in the "struggle for existence."

CHLAMYDOSAURUS KINGII, *Gray*.—The great frilled lizard is not common, but is occasionally met with. I kept a full-grown specimen for some days. It became quite tame, and would allow me to carry it about in my arms. Its long legs give it a different appearance from almost all other lizards. One day while riding in the bush I observed a fine specimen run up a tall slender tree; dismounting I followed thinking I could not but catch it. When near the top, and I within a couple of feet of it, seeing no escape down the tree, it took a flying leap of 30 feet or so, and long before I was down, was up a second tree, where I left it undisturbed.

TILIQUA SCINCOIDES, *White*. Native name *Ngura*.—The large scaly or blue-tongued lizard is not uncommon. I kept a large specimen alive for some months, feeding it on little scraps of meat. Considering the size of the lizard it is remarkably powerful, and when sitting at bay is by no means to be played with. If a stick be presented to it, it snaps at it, and then rapidly rolls itself round and round on its side, and unless the stick be firmly held, the lizard will probably twist it out of the hand. The one I had alive was kept secured by a string round its neck, and with a box for a kennel. When out feeding endeavours were made at different times to induce dogs to attack it, but it would hold its own like a cat, facing round to whichever side the attack was threatened from, and after keeping its assailant at bay for some time, on the first favourable opportunity would rapidly run into its box for safety.

LYGOSOMA LESUEURII, *D. & B.*—In North Queensland this common skink differs somewhat in colour from the specimens collected in New South Wales. In the northern specimens the general shade is a light brown; in the southern specimens a dark

olive-brown. Though I have seen scores of specimens in New South Wales I have not seen one with the peculiar light tint of the northern variety; nor are there any dark coloured specimens among those collected by me in the north. As regards markings, scales, &c., there are no appreciable differences between the two.

Next to *Diporophora australis* this is the commonest lizard in the district. It is exceedingly active and very difficult to capture.

LYGOSOMA ELEGANTULUM, *Ptrs. & Doria*.—This beautiful *Lygosoma* is not uncommon. Though the large majority of the lizards are found chiefly in the limestone district, all the specimens I obtained of this form were from the granite region where they were found under fallen timber.

LYGOSOMA NOVÆ-GUINÆÆ, *Meyer*.—Not common.

LYGOSOMA GUICHENOTI, *D. & B.*—Not common.

LYGOSOMA FUSCUM, *D. & B.*—This lizard may be regarded as rather rare. In addition to the ordinary form I obtained a specimen of a variety which differs somewhat from the normal type. On the back and sides the scales are very markedly carinate. From the occiput to the shoulder region most of the scales are tricarinate, but behind this in the six dorsal rows the scales are practically all bicarinate, the bicarinate scales being continued on to the tail. The lateral and dorso-lateral scales are mostly tricarinate, but on nearing the abdominal region the scales become feebly bicarinate.

LYGOSOMA PECTORALE, *De Vis*.—Rare; only one specimen obtained.

LYGOSOMA MUNDIVENSE, n.sp.

The above name I have proposed for a presumably new *Lygosoma*, of which only one specimen was found.

Habit lacertiform. Distance between end of snout and fore limb contained $1\frac{1}{6}$ in distance between axilla and groin. Snout moderate, obtuse. Lower eyelid with undivided transparent disc, which is considerably larger than ear opening. Nostril pierced

in nasal. No supranasal. Fronto-nasal half broader than long, broadly in contact with rostral, just touching the frontal. Frontal slightly longer than fronto-parietals, in contact with 1st and 2nd supraoculars. Four supraoculars, the 4th larger than the 1st, the 2nd and 3rd subequal. Seven supraciliaries. Fronto-parietals united about as broad as long. Interparietal small. Parietals forming a median suture. One pair of nuchals and one pair of temporals border the parietals. Five upper labials in front of the subocular. Ear opening round, smaller than transparent disc, surrounded by small lobules, the anterior ones largest. Thirty-eight scales round the body, bi- and tri-carinate irregularly arranged. Præanals very slightly enlarged. Hind limb reaches axilla. Fore limb with four digits, hind limb pentadactyle. Twenty-six to twenty-seven subdigital lamellæ under 4th toe.

Light olive with on back large irregular spots or blotches of black each covering 2-4 scales; in the lateral region the spots form a reticulation especially by the side of the neck. Spots continued to the toes and to the point of the tail. Head above unspotted, laterally the upper labials are edged with black. Each lower labial has a black spot largest in posterior ones.

Total length	102 mm.	Fore limb,	15 mm.
Head	12 ,,	Hind limb.....	22 ,,
Width of head.....	7 ,,	Tail.....	60 ,,
Body	30 ,,		

Loc.—Muldiva, N. Queensland.

The name of the township is a corruption of the aboriginal name for the creek Mundiva after which I have named the species.

ABLEPHARUS TENUIS, *Broom* (Ann. Mag. N.H. (6) xviii., Oct. 1896, p. 342).—Rare.

ABLEPHARUS ORNATUS, *Broom* (*l.c.* p. 343).—Not common.

ABLEPHARUS BOUTONII, *Desj.*, var. PERONII, *Coct.*—Widely distributed and moderately common.

VARANUS GOULDII, *Gray.*—Native name *Wongo*. Though this moderately large monitor is fairly common further east, it is

rather scarce around Muldiva, and the only specimens I obtained were those brought to me by the natives.

VARANUS TIMORENSIS, *Gray*.—This small monitor is fairly common. In general habit it differs considerably from the larger sorts, and owing to the more feeble development of the limbs is not nearly so swift. When handled a peculiar sickly odour is given off.

In conclusion I must acknowledge my indebtedness to Mr. G. A. Boulenger, F.R.S., for kindly giving me his opinion on one or two specimens about which there was a little doubt.